The Impact of Ayurvedic *Sadvritta* on Immune Resilience: A Comprehensive Review

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Abstract- *Sadvritta*, a fundamental component of Ayurvedic lifestyle intervention, encompasses ethical, social, physical, mental, and moral conduct that impact immune resilience. This comprehensive review explores the principles of *Sadvritta* in classical Ayurvedic texts and draws parallels to modern immunological concepts using scientific databases. Ayurvedic concepts such as *Oja* (vital essence) and *Bala* (strength) correlate with immune cell function, stress modulation, and microbiome health. Ethical practices like truthfulness, non-violence, and self-control reduce psychological stress, a known immunosuppressant. Social harmony and strong social networks improve immune responses, while loneliness activates inflammation. Physical health is promoted through daily routines, seasonal regimens, and regular exercise, which enhance immune function. Mental practices like meditation and emotional regulation modulate the hypothalamic-pituitary-adrenal axis and slow immune aging. Moral conduct and spiritual practices promote *Oja*, corresponding to antioxidant reserves and hematopoietic stem cell health. The holistic nature of *Sadvritta* aligns with the biopsychosocial health model, and its principles can be integrated into public health to reduce lifestyle-related diseases. However, quantitative studies are needed to further validate the effects of *Sadvritta* on immune function. Collaboration between Ayurveda scholars and molecular immunologists may help bridge the gap between ancient wisdom and modern molecular biology findings, leading to the development of sustainable, culturally-rooted strategies for global health.

Keywords: *Sadvritta*, Vyadhikshamatva, Ayurveda, Immunity, *Oja*, *Bala*, Holistic Health, Stress, Microbiome

INTRODUCTION

Immunity, the capacity of an organism to resist pathogens and maintain homeostasis, depends on genetic, environmental, and lifestyle factors. Contemporary medicine appreciates the role of stress, nutrition, and mental health in immune dysfunction but tends to ignore the ethical and psychosocial aspects of well-being. The 5000-year-old medical system Ayurveda, fills this gap with *Sadvritta*, a code of ethics at the personal, social, and environmental levels to maintain *Vyadhikshamatva* (immunity) [1].

Sat and *Vritta*, meaning good and conduct, respectively, mention the importance of balance between the mind, body, and environment. Classical texts such as *Charaka Samhita* describe it as one of the components essential for both *Dhatu Samya* (tissue equilibrium) and *Oja* (vital immunity) [2]. This review aims to interpret the core components of boost immune resilience from the Ayurveda perspective of *Sadvritta*, in accordance with contemporary immunological aspects.

METHODS

Literature Search Strategy.
The main sources of data were classical Ayurvedic texts (*Charaka Samhita*, *Sushruta Samhita*, and *Ashtanga Hridaya*) and peer-reviewed articles obtained from PubMed, Google Scholar, and CCRAS publications.

Inclusion Criteria:

- Specific mentions of *Sadvritta* and immunity in Ayurvedic classes.
- Scientific studies on lifestyle, ethics, and immune function.

Data Synthesis:
The thematic analysis revealed that *Sadvritta* comprises five pillars: ethical (*Dharma*), social (*Sadharana*), physical (*Sharira*), mental (*Manasa*), and moral (*Upa*). These were correlated with immunological mechanisms, such as cytokine regulation, gut-immune interactions, and neuroendocrine signaling

RESULTS

Immune Modulation and Ethical Conduct (*Vyavaharika Sadvritta*)

Truthfulness (*Satya*), non-violence (*Ahimsa*), and self-control (*Brahmacharya*) are key pillars of ethical living as defined within *Charaka Samhita* [3]. These practices reduce psychological stress, which is a well-known immunosuppressant. Chronic stress increases cortisol levels, which inhibits lymphocyte proliferation and NK cell activity [4]. Such ethical mindfulness has been shown to reduce inflammatory markers (e.g., IL-6) and increase mucosal immunity IgA concentrations, thus reducing inflammation [5].

Social Conduct (Samajika *Sadvritta*) & Community Immunity

Elderly people, charity (*Daan*), and social harmony are core tenets of Ayurveda. In parallel, individuals with strong social networks have higher CD4+ T cell counts and improved vaccine responses [6]. In contrast, loneliness activates NF-κB-mediated inflammation, which increases the risk of infection [7].

Sharirika Sadvritta and the Impact on Physical Health

Dinacharya (a list of daily routines) and *Ritucharya* (seasonal regimens) promote circadian alignment and digestion. *Agni* (digestive fire) control nutrient absorption, which is imperative for leukocyte production. Obesity and metabolic syndrome associated with poor diet and sedentism [8] contribute to macrophage dysfunction and Th1/Th2 imbalance. *Sadvritta* recommends that regular exercise enhances neutrophil chemotaxis and decreases CRP levels [9].

The following section focuses on the role of behavior in neuroimmunity and immune function, especially as outlined under mental conduct (*Manasika Sadvritta*).

The hypothalamic-pituitary-adrenal (HPA) axis is regulated by meditation (*Dhyana*) and emotional regulation (*Prasanna Mana*). The table of contents (jump to) mindfulness practice increases telomerase activity, which slows immune aging [10]. Negative feelings, including anger (*Krodha*), increase catecholamines and inhibit IL-2 and antibody synthesis [11].

Dharmika Sadvritta (Moral Conduct) and Spiritual Immunity

Dharma (duty) adherence and spiritual practices promote *Oja*, which is known as the 'essence of immunity' [12]. *Oja* corresponds to contemporary notions of antioxidant reserves and hematopoietic stem cell health. Bhagavad Gita associate's altruism with parasympathetic activation, upregulating anti-inflammatory IL-10 [13].

DISCUSSION

Modern-Ayurvedic Synergy For Immunity Resilience

The holistic nature of *Sadvritta* matches the biopsychosocial health model. For example, *Oja* resembles the function of glutathione, which reacts with free radicals, whereas *Bala* is related to leukocyte mitochondrial activity [14]. The gut microbiome forms the basis of modern immunology, while in Ayurveda, its resident area, *Kostha*, is home to *Sadvritta*, whose guidelines of food intake prevent dysbiosis and leaky gut [15].

Practical Implications

Sadvritta can be integrated into public health to reduce lifestyle-related diseases. For example:

- CJS-66308: Mindfulness at Work: The Case for Workplace Mindfulness Programs to Reduce Stress Induced Immunosuppression
- Community kitchens advocate Satmya (wholesome diet) to strengthen the mucosal immunity.
- Prosocial behavior is associated with increased vaccine uptake [16].

DEFICIENCIES AND FUTURE DIRECTIONS

Therefore, while qualitative insights exist in Ayurvedic texts, quantitative studies are missing. There is a need for randomized trials on the effects of *Sadvritta* (*Yoga* and *Achara Rasayana*) on cytokine profiles. Ayurveda scholars working jointly with molecular immunologists may help marry wisdom from centuries ago regarding findings in molecular biology.

CONCLUSION

What emerges from the study of *Sadvritta* is the perennial model of immune resilience, interweaving virtue, and vitalism. Its principles — from truthfulness to circadian hygiene — echo contemporary findings on stress, inflammation, and microbiome health. Based on this transdisciplinary

analysis, we can develop sustainable culturally rooted strategies for global health.

Interest of conflict: None

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